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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/824,853

04/02/2001

Simon Jacobs

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03/02/2005

DORSEY & WHITNEY LLP  
INTELLECTUAL PROPERTY DEPARTMENT  
SUITE 3400  
1420 FIFTH AVENUE  
SEATTLE, WA 98101

EXAMINER

JARRETT, SCOTT L

ART UNIT

PAPER NUMBER

3623

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/824,853

Applicant(s)

JACOBS ET AL.

Examiner

Scott L. Jarrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 April 2001.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-12 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 02 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The attempt to incorporate subject matter into this application by reference to Guy Druce, Level-1 Algorithm, V1.6, is improper (Specification; Page 4).

Appropriate correction required.

### ***Claim Rejections - 35 USC § 101***

2. Claims 1 and 3-7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as

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opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result.

Regarding Claims 1 and 3-7, Claims 1 and 3-7 only recite an abstract idea. The recited method for assigning an order to an opening in a schedule does not apply, involve, or use the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The claimed invention, as a whole, is not within the technological art as explained above claims 1 and 3-7 are deemed to be directed to non-statutory subject matter.

Mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process. In the present case, none of the recited steps are directed to anything in the technological arts as explained above with the exception of the recitation of the term "database." Therefore, the term discussed is taken to merely recite a field of use and/or nominal recitation of technology.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Edgar et al., U.S. Patent No. 5,848,395.

Regarding Claims 1 and 2 Edgar et al. teach a system and method for assigning an order (appointment, booking, job) to an opening in a schedule (route) after a customer has selected an appointment window (specified times, booking, predetermined window, possible appointments) in the schedule, wherein the opening and the appointment are specified, comprising (Abstract; Column 1, Lines 15-28 and 45-68; Column 2, Lines 1-53; Figures 3-4):

- generating a list of schedulable time blocks (available appointments/bookings, predetermined windows, free time, time slots) for a shift (route, itinerary) identified in the opening;
- intersecting (matching, aligning, etc.) the opening and the appointment window to obtain a time range (appointment, booking); and
- choosing (selecting, assigning, confirming) the opening in which to assign the order if a schedulable time block from the list of schedulable time blocks includes the

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opening, and wherein the opening is within the time range obtained by the act of interesting.

Regarding Claims 3 and 8 Edgar et al. teach a method and system for assigning an order to a schedule after a customer has specified an appointment window in the schedule, comprising (Abstract; Column 1, Lines 15-28 and 45-68; Column 2, Lines 1-53; Figures 3-4):

- checking a list of openings (possible appointments, time slots, etc.) for overlap (match, fit) within the appointment window;
- generating a list of schedulable time blocks (free time, available time, etc.) in a shift (route, itinerary, schedule) if there is no overlap; and
- assigning the order to the schedule if there is an opening in the list of openings that overlaps with the appointment window or opening in the list of schedulable time blocks that overlaps the appointment window.

Regarding Claims 4 and 9 Edgar et al. teach that the scheduling system further comprising updating a tour time of the shift (route, itinerary), wherein updating including (start time, end time, etc.; Column 2 Lines 5-17):

- incrementing (determining, calculating, storing, accounting) the time required to travel to the order and from the order to a next order (travel times; Column 2, Lines 47-52; Column 3, Lines 11-16);

- incrementing a booked time for the shift by an amount of time needed for traveling to the order and time needed to work on the order; and
- adjusting a load level (utilization) of the shift to account for the order (each region receives the same portion of free time; Column 2, Lines 53-61).

Regarding Claims 5 and 10 Edgar et al. teach that the assignment and scheduling system further comprises the aggregation of at least two orders according to an aggregation criteria (region, geography; Column 1, Lines 20-25 and 59-65).

Regarding Claims 6 and 11 Edgar et al. teach that the assignment and scheduling system further comprising the optimization of the schedule (route, itinerary) wherein the system optimizes the jobs in the schedule by iteratively shifting (changing the sequence of jobs, de-fragmenting) jobs/free time and then evaluating a cost function to determine if the new schedule is more optimal than the last iteration (Column 2, Lines 53-68; Column 3, Lines 1-33).

Regarding Claims 7 and 12 Edgar et al. teach that the assignment and scheduling system further comprising committing the shift (schedule, appointment, route, reservation) and a plurality of other information, which has been modified to fit the order, to a database (Column 1, Lines 53-58; Figure 1, Element 11).

***Examiner Note***

5. Examiner has cited particular sections, pages, paragraphs and/or figures in the references applied to the claims for the convenience of the applicant. Although the specific citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Collins et al., U.S. Patent No. 5,623,404, teach a system and method for assigning an order (activity, reservation, appointment, etc.) to a resource, including but not limited to field service (mobile workers) personnel and further that the optimization of the schedules (shifts) includes a plurality of information regarding the type and nature of the order, e.g. travel time.

- Babayev et al., U.S. Patent No. 5,615,121, teach a system and method for assigning (scheduling) an order (customer service request) to a schedule after a customer has requested (specified) an appointment window (time window, alternative times, preferred time), comprising: checking a list of openings (available appointments,



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reservations, time windows) for overlap with the appointment window; generating a list of scheduling time blocks (available time, schedulable time, free time); and assigning (adding) the order to the schedule.

- Henneuse et al., U.S. Patent No. 5,963,913, teach a method and system for assigning an order (event) to a schedule after a customer has specified an appointment window, comprising checking a list of openings (available time slots, calendar, schedule) for overlaps (a match between the desired appointment time and the resources available time/existing schedule) and scheduling the event (assigning the order).

- Detjen et al., U.S. Patent No. 5,970,466, teach a system and method for assigning an order (scheduling an appointment) to a schedule after a customer has specified an appointment window (time slot, time block, schedulable time). Detjen et al. further teach there exists a plurality of different appointments (orders) types.

- Bucci et al., U.S. Patent No. 6,823,315, teach a system and method for assigning orders (tasks, activities, etc.) to a workforce (shift assignments) wherein a plurality of constraints (parameters, rules, etc.) are used to balance the work load and meet workers and the businesses requirements/preferences. Bucci et al. further teach that the dynamic scheduling system de-fragments (moves, reassigns, shifts, groups, clusters, etc.) worker shifts as part of the shift optimization process.

- Powell et al., U.S. Patent Publication No. 2001/0049619, teach system and method for assigning (allocating) an order to a schedule after a customer has specified an appointment window (time window) in the schedule. Powell et al. further teach that

the assignment and scheduling system further comprises aggregating a plurality of orders according to an aggregation criteria (geography). Powell et al. further teach that assignment and scheduling system commits schedule information to a database and takes into consideration worker load levels.

- Mozayeny et al., U.S. Patent Publication No. 2002/0035493, teach a system and method for assigning (setting up, creating) appointments (events, activities, tasks, orders, reservations, etc.) after a user has specified an appointment window (time slot), comprising: checking a list of openings (existing calendar/schedule, available time) looking for overlap with the appointment window; generating a list of schedulable time blocks (available time, calendar, schedule); and assigning (selecting, confirming, sending, creating, adding) the appointment to the schedule. Mozayeny et al. further teach that the assignment and scheduling system utilizes a database.

- Crici et al., U.S. Patent Publication No. 2005/0027580, teach a method and system for scheduling (assigning) appointments (reservations, activities, events, etc.) wherein a plurality of time slots (openings, available time, schedulable time) are made available to the user who may add (assign, create, schedule) an appointment to the schedule of another person (resource, worker). Crici et al. further teach that there are a plurality of information associated with appointments and that there exists a plurality of different appointment types.

- Padwick, Gordon et al., Special Edition Using Microsoft Outlook 2000, teach a system for assigning an appointment (reservation, task, activity, order) to an opening in a schedule after a user has selected an appointment window (day, time, etc.) in the

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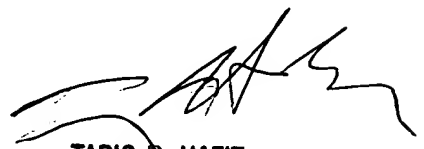
schedule, wherein the opening and the appointment window are specified, comprising: a list of schedulable time blocks, intersecting (overlapping, comparing, etc.) desired appointment window with the resource's availability (schedulable time blocks, free time, etc.) and choosing (selecting) the opening (appointment) from a list of available time slots (ranges, calendar).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (703) 306-5679. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (703) 305-9643. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SJ  
2/24/2005



TARIQ R. HAFIZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600